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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,359	04/20/2004	Tom Westberg	F-5495 DIV (0360-0172.01)	4891
44926 7590 02/06/2008 BAXTER HEALTHCARE CORPORATION ONE BAXTER PARKWAY DF2-2E DEERFIELD, IL 60015			EXAMINER WIEST, PHILIP R	
			ART UNIT 3761	PAPER NUMBER
			MAIL DATE 02/06/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/828,359	Applicant(s) WESTBERG ET AL.	
	Examiner PHILIP WIEST	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the rejection(s) of claim(s) 1-6 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly discovered prior art.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pages et al. (US 5,954,971) in view of Kamen et al. (5,350,357), and further in view of Lundback (US 4,750,868).

4. With respect to Claims 1-3 and 6, Pages et al. (hereafter Pages) discloses a blood processing system for removing leukocytes from blood comprising a plurality of blood inlets having flow control means (115v and 120v), a leukocyte filter 140, and a pump station 132, and a plurality of blood collection containers (145, 150) that receive blood from a separation device. The filter 140 communicates with blood collection containers (145, 150) that is located downstream of the filter. Pages, however, does

not disclose that the plurality of flow control means comprise a first and second pump that operate in tandem, nor does Pages disclose that the pump strokes cause a continuous flow from the source and a pulsatile flow to the filter.

5. Regarding Pages' lack of a first and second pump operating in tandem, Kamen et al. (hereafter Kamen) discloses a medical fluid pumping device comprising a plurality of pumping stations that operate by applying positive and negative pressures to a membrane. Regarding Claims 4 and 5, pneumatic fluid pressures are applied to the pumps and valves (Column 3, Lines 15-20). The controller operates the pumps in tandem such that the first pump is in a draw stroke while the second pump is in a pump stroke, and vice versa. By using this type of alternating, tandem pumping method, it is ensured that a constant stream of fluid is being pumped through the system, thereby improving the speed at which the device operates (Column 31, Line 58 through Column 33, Line 6). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the pumping/filtering apparatus of Pages with the alternating, tandem pumping arrangement of Kamen in order to expedite pumping operation. The pumping arrangement of Kamen provides a well-known improvement over the single pump and valve arrangement of Pages.

6. Regarding Pages' lack of a continuous input / pulsatile output configuration, Lundback discloses a pumping system and method that uses a pneumatic driving means to provide a pulsatile outflow and a continuous inflow. The system of Lundback comprises two pump stations, A and V, which are in communication between the fluid inlet and outlet (see FIG 3A). The method disclosed by Lundback includes a pumping

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stroke and a return stroke that operate in succession to one another in order to create a continuous inflow and a pulsatile outflow (see columns 6-7). Since the Dennehey device meets the needs of various pumping functions, it would have been obvious to one of ordinary skill in the art at the time of invention to combine the blood processing system of Dennehey with the pumping method of Lundback in order to provide a continuous inflow and pulsatile outflow in order to provide a pressure-sensitive pumping system, as taught by Lundback.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP WIEST whose telephone number is (571)272-3235. The examiner can normally be reached on 8:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Phil Wiest/
Examiner, Art Unit 3761
2/1/08

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

